

PEER REVIEW HISTORY

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ARTICLE DETAILS

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| TITLE (PROVISIONAL) | Community First Response and Out-of-Hospital Cardiac Arrest: A Qualitative Study of the Views and Experiences of International Experts |
| AUTHORS | Heffernan, Eithne; McSharry, Jenny; Murphy, Andrew; Barry, Tomás; Deasy, Conor; Menzies, David; Masterson, Siobhan |

VERSION 1 – REVIEW

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| REVIEWER | Tom Quinn Kingston University & St George's, University of London, UK Research in cardiac arrest funded by NIHR Research in acute cardiac care funded by BHF |
| REVIEW RETURNED | 26-Aug-2020 |

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| GENERAL COMMENTS | <p>Community First Responders (CFRs) are increasingly deployed to support professional Emergency Medical Services through embedding lifesaving skills in local communities.</p> <p>Little has been published to date on international (as opposed to in-country) CFR schemes are developed and supported, and there are sparse data on the perspectives of system leaders (in EMS, registries and academic institutions). The present paper provides useful insights which will be of considerable value to leaders in systems planning to introduce CFRs in their countries. The knowledge gaps identified in the present work will also be helpful in directing and prioritising future research in this important aspect of resuscitation science.</p> <p>The paper is very well written. Congratulations.</p> |
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| REVIEWER | Johan Herlitz University of Borås .Sweden I have been a coauthor together with Siobhan Mastersson, who is the first author of this submission. |
| REVIEW RETURNED | 14-Nov-2020 |

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| GENERAL COMMENTS | <p>This is an important paper.Maybe that the authors in the limitation part should highlight even further that they have interviewed people who in general are very positive to the idea about first responders.I wish too add a reference which may be cited together with reference 34 highlighting that there may be problems with the whole idea of first responders if it is not adressed appropriately(Svensson Anders et al: Home health care nurses experiences being on stand by as a first responders in a "while waiting for the ambulance assignment". Nord J Nurse Research 2016; 36(4):184-191.)</p> |
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| | The authors may add a Table in the start of the result section where they list the themes and the sub themes. Then it will be more easy for the readers to follow the text. Otherwise there is nothing that I wish to add or withdraw. |
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| REVIEWER | Peter O'Meara Monash University, Australia. |
| REVIEW RETURNED | 13-Dec-2020 |

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| GENERAL COMMENTS | <p>Thank you for the opportunity to review this paper on community first responders (CFR) across a number of high-income countries. The findings presented are consistent with previous work that examined volunteer ambulance systems, most notably that undertaken by Dr Christine Fahey/Stirling who studied a wide range of emergency service volunteers (including those affiliated with ambulance services) in Australia and New Zealand. If studies of the closely related volunteer ambulance systems are included some of the questions raised have been raised and similar findings published in regard to Australia and New Zealand. eg. O'Meara P, Tourle V, Rae J. Factors influencing the successful integration of ambulance volunteers and first responders into ambulance services. Health Social Care Community. 2012;20(5):488 - 496.</p> <p>One methodological concern I have is the influence of the paired interviews that could be viewed as surveillance to protect the reputation of the ambulance service. I don't consider this approach, which was probably not in the original research design, to offer the same advantages of focus groups. In my view, based on the explanation given, it is a limitation rather than a strength.</p> <p>The use of inductive thematic analysis is a useful approach, however, in this case the conclusions are largely descriptive. It seems that the opportunity to develop a theoretical position or model of best practice from these data was missed. Moving beyond pragmatism to undertake some deeper analysis would have been a valuable addition to the sparse literature in this field.</p> <p>While mentioned in passing, there was little expansion of the concept that CFRs might develop the social capital of the communities in which they serve. This aspect of CFR development and deployment could be further examined and is consistent with the recommendations to move beyond response times and survival rates as measures of success. The same argument can be made about the measurement of outcomes in many ambulance services that continue to measure performance through easily collected data that focus on patients and the health system rather than considering the holistic community outcomes.</p> |
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| REVIEWER | Lasse Raatiniemi Oulu University Hospital |
| REVIEW RETURNED | 18-Dec-2020 |

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| GENERAL COMMENTS | This is a qualitative study of first responders. This part of emergency treatment chain deserves more studies. The main limitations is that study objects were researchers, managers and clinicians, not the persons who work as first responder. You should mention this in the limitation section. |
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| | <p>There were no responders from Finland. Why? In Finland, the first responders have a long tradition and are available probably in all municipalities.</p> <p>My main concerns are</p> <ul style="list-style-type: none"> - types of first responders (from different participants) should be represented a table. - consider making an extra table of the key results in every themes. This could be more reader- friendly |
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VERSION 1 – AUTHOR RESPONSE

Reviewer 1

Community First Responders (CFRs) are increasingly deployed to support professional Emergency Medical Services through embedding lifesaving skills in local communities.

Little has been published to date on international (as opposed to in-country) CFR schemes are developed and supported, and there are sparse data on the perspectives of system leaders (in EMS, registries and academic institutions). The present paper provides useful insights which will be of considerable value to leaders in systems planning to introduce CFRs in their countries. The knowledge gaps identified in the present work will also be helpful in directing and prioritising future research in this important aspect of resuscitation science.

The paper is very well written. Congratulations.

Thank you for your comments. We appreciate your insights on our research.

Reviewer 2

This is an important paper. Maybe that the authors in the limitation part should highlight even further that they have interviewed people who in general are very positive to the idea about first responders.

Thank you for your feedback. As recommended, we have expanded the limitations section to further emphasise that the participants were likely to have a positive view of Community First Response (Lines 521-530).

I wish too add a reference which may be cited together with reference 34 highlighting that there may be problems with the whole idea of first responders if it is not adressed appropriately(Svensson Anders et al: Home health care nurses experiences being on stand by as a first responders in a "while waiting for the ambulance assignment". Nord J Nurse Research 2016; 36(4):184-191.)

As suggested, we have cited the Svensson Anders et al. (2016) paper (Lines 525-527).

The authors may add a Table in the start of the result section where they list the themes and the sub themes. Then it will be more easy for the readers to follow the text. Otherwise there is nothing that I wish to add or withdraw.

We have added a table to the start of the Results section that lists the themes and subthemes (see Table 2, Line 211).

Reviewer 3

Thank you for the opportunity to review this paper on community first responders (CFR) across a number of high-income countries. The findings presented are consistent with previous work that examined volunteer ambulance systems, most notably that undertaken by Dr Christine Fahey/Stirling who studied a wide range of emergency service volunteers (including those affiliated with ambulance services) in Australia and New Zealand. If studies of the closely related volunteer ambulance systems are included some of the questions raised have been raised and similar findings published in regard to Australia and New Zealand. eg. O'Meara P, Tourle V, Rae J. Factors influencing the successful integration of ambulance volunteers and first responders into ambulance services. Health Social Care Community. 2012;20(5):488 - 496.

Thank you for your review. We agree that our findings align with previous research on volunteer ambulance systems. We have now cited the O'Meara et al. (2012) paper in the Discussion section, as we believe that its findings are relevant to our study (Lines 471-473 and 527-528).

One methodological concern I have is the influence of the paired interviews that could be viewed as surveillance to protect the reputation of the ambulance service. I don't consider this approach, which was probably not in the original research design, to offer the same advantages of focus groups. In my view, based on the explanation given, it is a limitation rather than a strength.

We appreciate your methodological concern regarding the paired interviews. Consequently, we have amended and clarified the explanation given for the use of these interviews in the Methods section (Lines 124-132) and have noted the potential drawback of this approach in the limitations section (Lines 518-521).

The use of inductive thematic analysis is a useful approach, however, in this case the conclusions are largely descriptive. It seems that the opportunity to develop a theoretical position or model of best practice from these data was missed. Moving beyond pragmatism to undertake some deeper analysis would have been a valuable addition to the sparse literature in this field.

We have now acknowledged in the limitations section that the development of a theoretical framework of best practice in Community First Response would have been a valuable addition to the literature and thus should be an avenue for future research in this field (Lines 530-534).

While mentioned in passing, there was little expansion of the concept that CFRs might develop the social capital of the communities in which they serve. This aspect of CFR development and deployment could be further examined and is consistent with the recommendations to move beyond response times and survival rates as measures of success. The same argument can be made about the measurement of outcomes in many ambulance services that continue to measure performance through easily collected data that focus on patients and the health system rather than considering the holistic community outcomes.

We have expanded the Discussion section to further explore the concept of social capital and holistic outcomes in relation to Community First Response (Lines 485-504).

Reviewer 4

This is a qualitative study of first responders. This part of emergency treatment chain deserves more studies. The main limitations is that study objects were researchers, managers

and clinicians, not the persons who work as first responder. You should mention this in the limitation section.

Thank you for your comments. We have amended the limitations section to acknowledge that Community First Responders were not consulted as part of this study (Lines 513-517). We also noted that previous qualitative studies have examined the experiences of Community First Responders. Therefore, this study focused on the perspectives of researchers, clinicians, and managers in this field (Lines 102-105 and 513-517).

There were no responders from Finland. Why? In Finland, the first responders have a long tradition and are available probably in all municipalities.

We have expanded the limitations section in order to note that some countries with a tradition of Community First Response, such as Finland, were not represented in this study (Lines 510-513). This was due to the design of the study. Specifically, this was a qualitative study in which sampling ceased when saturation and maximum variation had been achieved, rather than when a participant from every region with an established Community First Response programme had been recruited.

My main concerns are

- types of first responders (from different participants) should be represented a table.**
- consider making an extra table of the key results in every themes. This could be more reader-friendly**

We agree that it would be beneficial to list the types of first responders represented by the participants in a table. Unfortunately, the semi-structured design of the interviews meant that information on first responder type was not collected systematically and comprehensively for each participant/region. Therefore, it was not possible to prepare a table listing this information. Furthermore, the Community First Response models discussed in the study were diverse and complex and thus difficult to summarise succinctly. For example, the participants from the USA reported that there are countless Community First Response models/programmes throughout the country. Instead, some additional contextual information on the Community First Response models discussed in the study has been added to the Results section (Lines 196-204). Finally, as recommended, we have added a table to the Results section that summarises the results of the thematic analysis (see Table 2, Line 211).

VERSION 2 – REVIEW

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| REVIEWER | Johan Herlitz Department of Caring Science, University of Borås, Sweden |
| REVIEW RETURNED | 22-Jan-2021 |
| GENERAL COMMENTS | This is a fine manuscript. I have nothing to add that will improve this manuscript even further. |